

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:  
Chen, et al.

Serial No.: 10/611.589

Confirmation No.: 5241

Filed: June 30, 2003

**For:** Method and Apparatus for  
Annealing Copper Films

Group Art Unit: 1742

Examiner: George P. Wyszomierski

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P.O. Box 1450  
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August 17, 2006  
Date

Steven H VerSteeg

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Respectfully submitted,



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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet 1

of 4

Application Number

10/611,589

Filing Date

June 30, 2003

First Named Inventor

Chen, et al.

Group Art Unit

1742

Examiner Name

George P. Wyszomierski

Attorney Docket Number

APPN/001717.Y1/PPC/EC/PC/KM

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Paragraphs or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (Where)			
	A1	US-6929774	08/16/2005	Morad, et al.	
	A2	US-6656763	12/09/2003	Morad, et al.	
	A3	US-6639189	10/28/2003	Ramana, et al.	
	A4	US-6635157	10/21/2003	Dordi, et al.	
	A5	US-6666255	05/20/2003	Ho	
	A6	US-6544336	04/08/2003	Batchelder, et al.	
	A7	US-6532772	03/18/2003	Robinson	
	A8	US-6526686	03/04/2003	Ramana, et al.	
	A9	US-6512206	01/28/2003	McEnire, et al.	
	A10	US-6483061	11/19/2002	Batchelder	
	A11	US-6477787	11/12/2002	Morad, et al.	
	A12	US-6473993	11/06/2002	Yagi, et al.	
	A13	US-6471913	10/29/2002	Weaver, et al.	
	A14	US-6429947	07/23/2002	Womack, et al.	
	A15	US-6367182	05/14/2002	Horie, et al.	
	A16	US-6357143	03/19/2002	Morad, et al.	
	A17	US-6307164	10/23/2001	Womack, et al.	
	A18	US-6287154	10/02/2001	Gross, et al.	
	A19	US-6296908	10/02/2001	Stimmet, et al.	
	A20	US-6294219	09/25/2001	Tsal, et al.	
	A21	US-6290833	09/18/2001	Chen	
	A22	US-6276072	08/21/2001	Morad, et al.	
	A23	US-6264752	07/24/2001	Curtis, et al.	
	A24	US-6263587	07/24/2001	Real/makers, et al.	
	A25	US-6258223	07/10/2001	Cheung, et al.	
	A26	US-6242348	06/29/2001	Nogami, et al.	
	A27	US-6228768	05/08/2001	Woo, et al.	
	A28	US-6222164	04/24/2001	Stoddard, et al.	
	A29	US-6213853	04/10/2001	Gonzalez-Martin, et al.	

Examiner

Date Considered

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STATEMENT BY APPLICANT**

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Sheet 2

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Application Number	10/811,589
Filing Date	June 30, 2003
First Named Inventor	Chen, et al.
Group Art Unit	1742
Examiner Name	George P. Wyszomierski
Attorney Docket Number	APPM/001717.Y1/PPC/EC/PICKIM

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A30	US-8211495	04/03/2001	Stoddard, et al.	
	A31	US-8207937	03/27/2001	Stoddard, et al.	
	A32	US-8182376	02/06/2001	Shin, et al.	
	A33	US-8174386	01/16/2001	Sikka, et al.	
	A34	US-8171922	01/09/2001	Maghsoodnia	
	A35	US-8155275	12/05/2000	Shinbara, Keoru	
	A36	US-8151447	11/21/2000	Moore, et al.	
	A37	US-8123825	06/26/2000	Uzoh, et al.	
	A38	US-8113696	06/05/2000	Rasijmakers, et al.	
	A39	US-8103636	08/15/2000	Robinson	
	A40	US-8091498	07/18/2000	Hanson, et al.	
	A41	US-8072163	06/06/2000	Armstrong, et al.	
	A42	US-8062682	05/16/2000	Kawamoto, et al.	
	A43	US-8037287	03/14/2000	Chiang, et al.	
	A44	US-8030206	02/29/2000	Williams, et al.	
	A45	US-8017820	01/25/2000	Ting, et al.	
	A46	US-8017777	01/25/2000	Kim, et al.	
	A47	US-8004047	12/21/1999	Akimoto, et al.	
	A48	US-6997712	12/07/1999	Ting, et al.	
	A49	US-6994675	11/30/1999	Bethune, et al.	
	A50	US-6990706	11/09/1999	Bleck, et al.	
	A51	US-6972110	10/26/1999	Akimoto, Masami	
	A52	US-6913147	06/15/1999	Dubin, et al.	
	A53	US-6907790	05/25/1999	Kellam	
	A54	US-6891513	04/06/1999	Dubin, et al.	
	A55	US-688749	03/23/1999	Huggins, et al.	
	A56	US-6865134	03/23/1999	Shibata, et al.	
	A57	US-6855681	01/05/1999	Maydan, et al.	
	A58	US-6863486	12/29/1998	Ono, et al.	

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Date Considered

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Sheet 3

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Application Number	10/611,589
Filing Date	June 30, 2003
First Named Inventor	Chen, et al.
Group Art Unit	1742
Examiner Name	George P. Wyszomierski
Attorney Docket Number	APPM/001717.Y1/PPC/EC/ICKIM

**U.S. PATENT DOCUMENTS**

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	A59	US-5848598	12/08/1998	Semkow, et al.	
	A60	US-5830045	11/03/1998	Togawa, et al.	
	A61	US-5807489	09/15/1998	Crafts, et al.	
	A62	US-5731676	03/24/1996	Zila, et al.	
	A63	US-5681780	10/26/1997	Mihara, et al.	
	A64	US-5673750	10/03/1997	Tsubone, et al.	
	A65	US-5655167	09/09/1997	Oguchi, et al.	
	A66	US-5654337	09/09/1997	Davis, et al.	
	A67	US-5639301	06/17/1997	Sasada, et al.	
	A68	US-5616206	04/01/1997	Lee	
	A69	US-5609066	03/11/1997	Hayashi, et al.	
	A70	US-5527390	06/18/1996	Ono, et al.	
	A71	US-5510216	04/23/1996	Calebrese, et al.	
	A72	US-5484011	01/16/1996	Tepman, et al.	
	A73	US-5476429	12/26/1995	Komino, et al.	
	A74	US-5431700	07/11/1995	Sloan	
	A75	US-5384284	01/24/1995	Doan, et al.	
	A76	US-5374594	12/20/1994	Van de Ven, et al.	
	A77	US-5314541	06/24/1994	Saito, et al.	
	A78	US-5297010	03/29/1994	Yoshioka, et al.	
	A79	US-5246364	06/28/1993	Lin, et al.	
	A80	US-5168886	12/08/1992	Thompson, et al.	
	A81	US-5156731	10/20/1992	Ogasawara, et al.	
	A82	US-5098198	03/24/1992	Nulman, et al.	
	A83	US-4864263	08/08/1989	Chang, et al.	
	A84	US-4481406	11/05/1984	Muka, et al.	
	A85	US-4288943	05/05/1981	Goldslein, et al.	
	A86	US-2026605	01/07/1905	Antisoli	
	A87	US-2004/0084301	05/06/2004	Doril, et al.	

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Examiner Name	George P. Wyszomierski
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		Number/Kind Code <sup>2</sup> (if known)			
	A88	US-2004/0079633	04/29/2004	Cheung, et al.	
	A89	US-2003/0045095	03/06/2003	Ritzdorf, et al.	
	A90	US-2002/0102837	08/01/2002	Ritzdorf, et al.	
	A91	US-2002/0004301	01/10/2002	Chen, et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>3</sup>
		Country Code <sup>4</sup> /Number <sup>4</sup> /Kind Code <sup>4</sup> (if known)				
	B1	JP 54 146112	11/20/1979	Nakagawa		
	B2	JP 10 079432	03/24/1998	Ro		X
	B3	EP 0629904	03/18/1998	Rogelstad		X
	B4	EP 0725427	08/07/1998	Davenport		X

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>3</sup>
	C1	Austrian Patent Office International Search Report dated February 7, 2000 for Singapore Application No. 00010504. (APPM/003421SG)	
	C2	Decision on First Patent Examination by Taiwan Intellectual Property Office, Ministry of Economic Affairs dated April 9, 2002 and cited reference 86/103261. (APPM/001717TW03)	
	C3	Hohm, et al. "Stationary Contacts," Electric Contacts Theory and Applications, Springer-Verlag, New York, Inc. 1967, pp.1-375.	
	C4	Vertec Online®, "Products Overview," 1996-1998, 5 pages (No Month).	
	C5	Wright, et al. "Low temperature etch chuck: Modeling and experimental results of heat transfer and wafer temperature," J. Vac. Sci. Technol. A. 10(4), Jul./Aug. 1992, pp. 1065-1070.	

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